# (11) **EP 3 409 859 A3**

(12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 12.12.2018 Bulletin 2018/50

(51) Int Cl.: **E04B** 9/12 (2006.01)

E04B 9/06 (2006.01)

(43) Date of publication A2: **05.12.2018 Bulletin 2018/49** 

(21) Application number: 18460031.0

(22) Date of filing: **30.05.2018** 

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

**BA ME** 

**Designated Validation States:** 

KH MA MD TN

(30) Priority: **30.05.2017** PL **42175617** 

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#### (54) A T-BAR WITH CONNECTING SLAT FOR FIXING COMPONENTS OF SUSPENDED CEILING

(57)A subject of this invention is a T-bar with connecting slat (1) for fixing components of suspended ceiling which in web (3) has a rectangular opening (4). The opening (4) slide fits the slat (5), formed from parallel metal sheets (5' and 5") joined permanently together. The opposite pairs of boundary strips of each sheet metal are bent outside so that they embrace edges of the opening (4), in parallel to the longitudinal axis of bar (1). On the bent boundary strip of metal sheet, there is at least one groove forming a notch (9) from the side of web (3), and on the surface of web (3), on the edge of opening (4), there is at least one groove (8), which forms a latch together with the notch (9). The connecting slat (5), in the light of opening (4) made in the web (3) incorporates pass-through shaped slots (6).

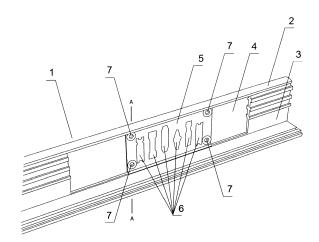


Fig. 1



# **EUROPEAN SEARCH REPORT**

Application Number

EP 18 46 0031

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| 0-4  | Citation of document with indication  | n. where appropriate.   | Relevant  | CLASSIFICATION OF THE                              |
|--|---|---|---|--|
| Category   | of relevant passages  |   | to claim  | APPLICATION (IPC)                                  |
| A,D  | EP 2 556 200 A1 (USG IN<br>13 February 2013 (2013-<br>* the whole document *                                  |   | 1-4   | INV.<br>E04B9/12                                   |
| A  | EP 0 387 964 A1 (KUIPER<br>19 September 1990 (1990<br>* column 1, line 1 - line<br>* column 5, line 41 - line | -09-19)<br>ne 29 *  | 1-4   | ADD.<br>E04B9/06                                   |
| Α  | US 4 479 341 A (SCHUPLII<br>30 October 1984 (1984-10<br>* column 1, line 5 - co<br>figures 1,2,4 *            | 0-30)   | 1-4   |  |
|  |   |   |   | TECHNICAL FIELDS<br>SEARCHED (IPC)<br>E04B<br>E04C |
|  |   |   |   |  |
|  | The present search report has been drawn up for all claims  |   |   |  |
|  | Place of search  The Hague  | Date of completion of the search  8 October 2018  | Lor   | Examiner   |
| The Hague  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document |   | T : theory or principle<br>E : earlier patent do<br>after the filing date<br>D : document cited in<br>L : document cited fo | theory or principle underlying the invention<br>earlier patent document, but published on, or<br>after the filing date<br>document cited in the application<br>document cited for other reasons |  |
|  |   |   | & : member of the same patent family, corresponding document  |  |

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### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 18 46 0031

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

08-10-2018

| 10 | Patent document cited in search report | Publication<br>date | Patent family<br>member(s)   | Publication<br>date  |
|----|--|---------------------|--|--|
| 15 | EP 2556200 A1                          | 13-02-2013          | AR 086373 A1 CA 2836237 A1 CN 103518024 A CY 1115758 T1 DK 2556200 T3 EP 2556200 A1 ES 2516316 T3 HR P20140973 T1 PT 2556200 E | 11-12-2013<br>06-12-2012<br>15-01-2014<br>25-01-2017<br>20-10-2014<br>13-02-2013<br>30-10-2014<br>19-12-2014<br>16-10-2014 |
| 25 |  |                     | SI 2556200 T1<br>SM T201400162 B<br>TW 201250091 A<br>US 2012304574 A1<br>WO 2012166283 A1<br>ZA 201309551 B                   | 31-12-2014<br>15-01-2015<br>16-12-2012<br>06-12-2012<br>06-12-2012<br>27-08-2014   |
| 30 | EP 0387964 A1                          | 19-09-1990          | CA 2012068 A1<br>DE 69004716 D1<br>EP 0387964 A1<br>NL 8900651 A<br>US 5076036 A   | 16-09-1990<br>05-01-1994<br>19-09-1990<br>16-10-1990<br>31-12-1991   |
|    | US 4479341 A                           | 30-10-1984          | NONE   |  |
| 35 |  |                     |  |  |
| 40 |  |                     |  |  |
| 45 |  |                     |  |  |
| 50 | P0459                                  |                     |  |  |
| 55 | FORM P0458                             |                     |  |  |

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82